**FIELD EXERCISE 4. ADDING VALUE AFTER HARVEST**

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| *OBJECTIVE*  **After this exercise the participants will be able to:**   * Explain different post-harvest activities that may add value. * Explain how post-harvest value added processes are important when working with buyers. * Understand how to make decisions on post-harvest activities. | |
| *EQUIPMENT NEEDED*   * Flip chart * Marker * Calculator * Images | *EXPECTED OUTPUT*   * Producers understand the information needed to determine the value of post-harvest activities and to make decisions to increase profitability. |
| *TIME*  45-60 minutes | *PREPARATION*   * Review all the Lesson 4 information. Prepare the activity prior to the lesson on the flip chart. Draw the table for showing the activity calculations. The table (with answers) is given below. Do not write in the answers beforehand as that will be done during the activity. |

***SUGGESTED PROCEDURE:***

**Say*:*** In the last exercise we discussed how to choose buyers based on estimated profit. In the exercise, we looked at the benefits and costs of selecting different buyers or markets.

In this exercise, we are going to discuss some of the post-harvest activities that may be done to increase the price of a crop. When thinking about whether or not to do the post-harvest activities one needs to think about the quality of the crop and the price and cost of doing the post-harvest activity.

First, let’s go over some possible activities to do following harvest.

Now go through each of the common practices, holding up the pictures to illustrate the practice.

**Say**: First, drying and shelling may be possible activities.

**Ask*:*** Which crops should be dried and shelled?

Let 2-3 participants give answers and then continue. Then,

**Say*:*** When water moisture is removed from a crop it reduces spoilage time and makes it easier to mill or grind.

More common practices after harvest are cleaning and sorting.

**Ask*:*** Do any of you clean and sort any of your crops before selling? Which ones?

Let 2-3 participants give answers and then continue.

**Say**: Proper storage and packing bags or equipment is another post-harvest activity that may add to the value when selling by maintaining quality. There is potential income gain when investing in better storage materials. Storing crops after harvest is often a good practice to increase prices. Furthermore, working with others to sell together can increase prices.

***ACTIVITY:***

**Say**: In the next exercise, we will compare prices and costs to estimate profit from a producer group that decided to sell their cowpeas together following storage. Their goal was to hold the crop in storage until the prices were higher.

First, right after cowpea harvest the price for cowpeas was 300/kg. The group decided to sell a total of 20,000 kg together. They came together and decided to purchase PICS bags at 1500/ 100 kg bag because they had learned from a workshop the benefits of the bags.

Several farmers said that price was too high and they didn’t think that they would make money so they decided to drop out of the group and sell their cowpeas to a trader who paid 300/kg for their 10,000 kg of cowpeas. Let us call them Group 1 from now. So, when Group 1 sold the crop they made 3,000,000 total profit. They were happy with this.

The other farmers, let us call them Group 2, who now had a total of 10,000 kg of cowpeas, purchased 1,000 bags for all the cowpeas. This cost a total of 1,500,000. The farmers were a little concerned about the cost and they were lucky to have been able to buy these on credit without interest.

They each stored their cowpeas on their farms. Five months went by and the Field Agent came to the group to say that the price for cowpeas was now 600/kg and that it was time to sell. The farmers sold their crop at the market paying 100,000 for truck transport. From the sale, they made 6,000,000.

Let us calculate their profit since they purchased PICS bags and paid for transport and we need to subtract these costs before we can figure the profit. First the income was 6,000,000 and the cost of the bags were 1,500,000. The difference here leaves 4,500,000. Next, subtract the transport which was 100,000. The difference including transport costs gives 4,400,000. This means that this group made 4,400,000 in profit from post-harvest activities.

**Ask*:*** Do you think that it was worth it for group to take the chance and purchase PICS bags?

Let 3-4 participants answer and then continue.

**Say**: One additional consideration here is that these PICS bags can be kept and used again for the next grain crop produced.

**Ask**: If you were one of the producers here, which group would you have joined? Why?

Let them discuss briefly and continue.

**Say*:*** This example looked at adding value from a crop by doing post-harvest activities, in this case, storage. Following this session, it may be good to discuss different post-harvest options that may add value to crops by increasing prices paid by buyers.

The following table provides the answers to the activity above.

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| **Lesson 4 Field Exercise Activity** |  |  |  |  |  |
| **PICS storage of cowpea** |  | **Income** | **Costs** | |  |
|  | **Price/kg** |  | **PICS bag** | **Transport** | **Net income** |
| Group 1 | 300 | 3,000,000 | 0 | 0 | 3,000,000 |
| Group 2 | 600 | 6,000,000 | 1,500,000 | 100,000 | 4,500,000 |